Jan.-June 1996

NORTH QUEENSLAND NATURALISTS CLUB

EDITION 201

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OBJECTS: The furtherance of the study of the various branches of Natural History and the preservation of our heritage of indigenous flora and fauna.

MEETINGS: Second Tuesday of each month at 8pm at the Cairns Education Centre, Greenslopes Street, Edgehill, Cairns.

FIELD DAYS: Sunday before meeting.

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CLUB OFFICERS:

PRESIDENT	— *MR. TED BILL*
HON. SECRETARY	— *MRS. DAWN MAGARRY*
HON. TREASURER	— *MRS. DERNA ELSDON*
EDITOR	— *MS. ELEANOR DUIGNAN*

SUBSCRIPTIONS: (Due September 30th)

CITY AND SUBURBAN MEMBERS	**$15.00**
COUNTRY MEMBERS & PENSIONERS	**$10.00**
FAMILY MEMBERSHIP	**$20.00**

FROM THE EDITOR

The first half of 1996 has indeed seen a lot of changes to Cairns particularly in development to both the city and the surrounding areas. From the opening of the Casino, the Cairns Campus of the James Cook University, Smithfield Shopping Complex, additions to Earlville Shoppingtown, the new Cairns Central Railway Complex, roadworks to keep up with these additional traffic demands and many other huge undertakings, we observe and note the onslaught of tourism and urbanisation to our city.

The changes brought about have put a marked strain on the local population of Cassowary on Mt. Whitfield, wading bird habitat and migratory bird feeding grounds of the Cairns Esplanade, breeding grounds for prawns, fish and other crustaceans of Trinity Inlet, destruction of rainforest to lower slopes of our surrounding ranges and degradation of the Cairns Central Swamp. All contribute to the decline and loss of many frog species from our own local area as well as endemic birds, plants, mammals and reptiles.

To keep up with the changes, the North Queensland Naturalist Journal has been successful in recording these events both directly and indirectly with the articles written for and published therein, many of which describe previously unrecorded natural history taxonomy and phenomenon as well as naturalist's general notes and points of view.

The importance of recording the changes to our environment has become crucial and the North Queensland Naturalist Journal is a guiding source for information to those who follow through with in-depth scientific study on changes to the environment or some detailed notes on say - further feeding habits of a Red-legged Paddymelon.

To those who regularly contribute articles of observation and species records I commend highly. Without these the Journal would not be what it is today. However, I must point out that anyone may contribute to the Journal and I encourage you to write up those notes of observation however insignificant they may seem to you.

Best wishes.

JNL 201 CONTENTS JAN-JUNE '96

Asian House Gecko	By - M. Anthony	2
Interesting N.Q. Beetles	By - R. Storey	4
Frog Recovery Conference	By - E. Duignan	6
'Field Guide to Aust. Insects'	By - C. Pearce	7
Lakeside Observations	By - B. Constable	8
Club Outings	By - S. Kimmins	10 & 14
Diet Observations	By - D. Magarry	11 & 12
Phyllachoraceae of Australia	By - C. Pearce	13
'Nats Natter'	By - N. Dell	15 - 17
Cairns Central Swamp/checklist	By - R. Jago	18 - 22

ASIAN HOUSE GECKO (Hemidactylus frenatus) 'Bridled half-toe'
Dumeril and Bibron, 1836
- KNOW YOUR REPTILES AROUND CAIRNS -
With permission from M. Anthony - 'Condro Vol3 No.1 1995"

History

The Asian House Gecko is recorded from Southern Africa, the Mediterranean, Madagascar, India, Sri Lanka, South East Asia north to Japan and south to Australia, Islands of the South Pacific including Hawaii, and also Mexico. In Australia the species is restricted to human habitations in the tropical north. In Western Australia the House Gecko is believed to have established itself at only two localities, both offshore islands (West Is. on Ashmore Reef and perhaps the Montebello Islands) - Storr, Smith & Johnstone (1990). They also occur on Christmas and Cocos (Keeling) Islands (Cogger, 1994). Elsewhere in northern Australia it is restricted to the Top End and settlements south along the Stuart Highway, and the northeast coast of Queensland from Townsville north to the islands of Torres Strait and the west coast of Cape York Peninsula. There is also a record from Brisbane area (Ingram & Raven, 1991), but this may not represent an established population.

Distribution

It is interesting to note the distribution remarks in some of the older books on Australian Lizards, which chronicle the colonisation of the N.T. by this animal. Eric Worrell, in 1963, gives the distribution as 'Islands off Arnhem Land to South-east Asia'. In 1970, Robert Bustard notes that H. frenatus 'has recently invaded the Darwin area where it is rapidly establishing itself as the Common House Gecko supplanting the native House Gecko (i.e. Gehyra australis)'. By 1976 Steve Swanson states that 'it is now the Common House Gecko in this area, and has almost completely replaced the native House Gecko'. Similarly in the old townsite and camp at Jabiru East in the N.T. the Common House Gecko in 1980 was the native G. Australis; with the influx of population and freight with the commencement of mining the Asian House Gecko appeared and had supplanted the native species within a few years (pers. obs.). This species also appears to compete successfully in north-east Queensland with another, smaller species of gecko which may also inhabit human dwellings Lepidodactylus lugubris. Where the larger, more aggressive H. frenatus occurs L. lugubris is not found, even though their distributions overlap. (T. Hawkes pers. comm.).

It is this ability to cohabit with humans so successfully, coupled with its tendency to stow away in freight and vehicles, which has enabled it to spread rapidly in northern Australia (Ehmann, 1992). This species may indeed be dependent on humans for its survival away from its natural range, as it is known to have disappeared from abandoned settlements.

Habits

The Asian House Gecko, as a result of it successful co habitation with humans, is now a common sight and sound experience to those living in and visiting Australia's nothern tropics. Just about every house and building in the Top End of the N.T. and far north Queensland has a population of these geckos living both inside and outside. They tend to congregate around lights where they capture insects attracted to the light, slowly stalking them before pausing just short, then pouncing on the moth, beetle, bug, cockroach or virtually whatever moves, including juvenile conspecifics (G. Werren pers. comm.). A number of individuals (4-6 - Greer, 1989; 10 or more - Bustard, 1970) may be seen around a light, especially indoors, but they appear to keep a certain distance between themselves - if one individual approaches too closely to another, it will be chased away - larger specimens will tend to command a better position closer to the light and thus the food; smaller specimens will locate themselves further away (pers. obs.).

In fact - as I prepare this article - one my pet 'Hermies' barks from behind the fridge in the kitchen.

SPOTLIGHTING - LAKE MORRIS ROAD

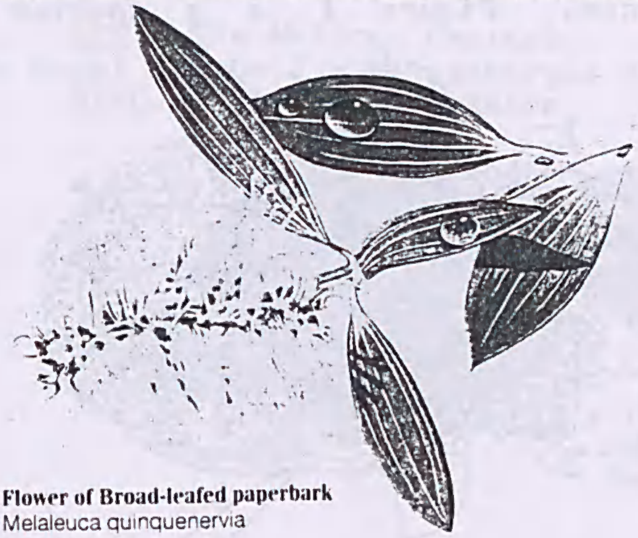
28/5/96: Participating in an evening's spotlighting trip with fellow frog enthusiasts species identified were:-

Stony Creek Frog - Litoria lesueuri (5)
Ornate Nursery Frog - cophixalus ornatus (H)

Pelagic gecko - Nactus pelagicus
Northern leaf-tail gecko - Saltuarius cornutus

Small eyed snake - Rhinoplocephalus nigrescens + 1 D.O.R.
Brown tree snake - Boiga irregularis

Not one night bird or possum



Flower of Broad-leafed paperbark
Melaleuca quinquenervia

INTERESTING NORTH QUEENSLAND BEETLES AND THEIR HABITS - PART 1

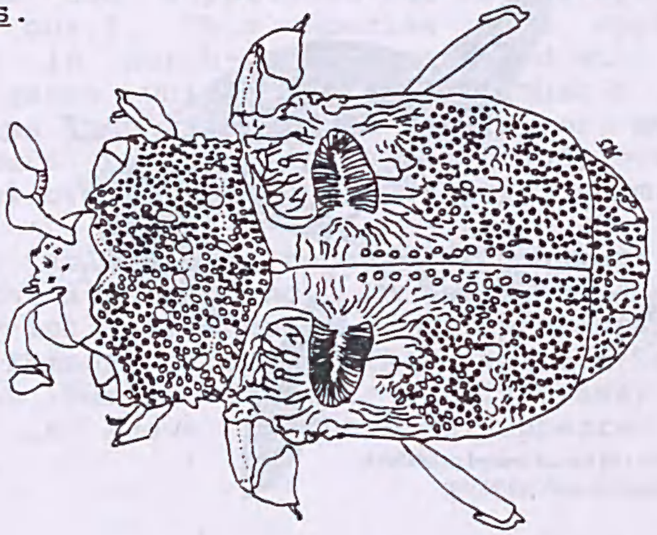
By: Ross Storey

This is the first in a series of short articles designed to raise Naturalist Club members' awareness of an interesting group of small creatures, the beetles. With an estimated 30,000 species in 117 families in the Australian Fauna alone, you can imagine that there are many, many strange stories to be told.

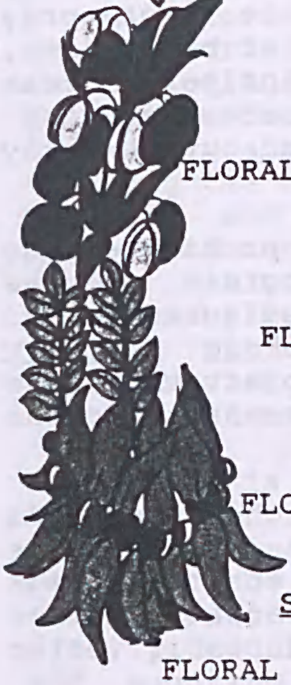
One of the oddest lifestyles to be found in beetles involves living within the nests of social insects, especially ants. Such insects are known as inquilines and those species peculiar to ant nests, myrmecophiles. Although this lifestyle is not common, several hundred species of myrmecophiles in 12 beetle families are known in Australia. Their biology varies - some feed on refuse in the ants nest, others use the nest mostly for safe shelter, and a few actually feed on the ants or their larvae. Still others provide a service to the ants (often in the way of food items) and are maintained voluntarily by the host ants in the nest.

One of the most interesting groups of myrmecophiles in Australia is the subfamily Chlamydopsinae in the beetle family Histeridae. This subfamily is mostly confined to Australia where 41 species in 5 genera have been described. This number represents only a small percentage of species actually present in this country. Only one species has been described from North Queensland (Townsville) , yet the Mareeba DPI insect collection has over 40 local species. Most of these are probably undescribed, including several new genera.

Chlamydopsines can be collected regularly in ants nests and up to 5 species are known from any particular site in North Queensland. Chlamydopsines have been observed being carried around by the host ants and many species have specialised tufts of hairs called trichomes which apparently produce chemicals which attract the ants. No larvae have yet been found though these likely reside also within the ants nest. The beetles bizzare punctures, hairs and horns reward study with a microscope. Figure 1 is a species of the genus *Chlamydopsis*.



AUSTRALIAN STATE EMBLEMS



QUEENSLAND - The Sunshine State
ANIMAL - Koala
FLORAL - Cooktown Orchid - Dendrobium bigibbum
BIRD - Brolga

VICTORIA - The Garden State
ANIMAL - Leadbeaters Possum
FLORAL - Pink Heath - Epacris impressa
BIRD - Helmeted Honeyeater

NEW SOUTH WALES - The First State
ANIMAL - Platypus
FLORAL - Waratah - Telopea speciosissima
BIRD - Kookaburra

SOUTH AUSTRALIA - The Festival State
ANIMAL - Hairy-Nosed Wombat
FLORAL - Sturt's Desert Pea - Clianthus formosus
BIRD - Magpie

WESTERN AUSTRALIA - The State of Excitement
ANIMAL - Numbat
FLORAL - Red and Green Kangaroo Paw - Anigozanthos manglessii
BIRD - Black Swan

TASMANIA - The Holiday Isle
ANIMAL - Tasmanian Devil (Unofficial)
FLORAL - Tasmanian Blue Gum - Eucalyptus coccifera

NORTHERN TERRITORY - Outback Australia
ANIMAL - Red Kangaroo
FLORAL - Sturt's Desert Rose - Gossypium sturtianum
BIRD - Wedge Tailed Eagle

ACT - The Nations Capital
FLORAL - Royal Bluebell - Wahlenbergia gloriosa
BIRD - Gang-Gang Cockatoo

AUSTRALIA

FROG RECOVERY CONFERENCE - CAIRNS - FEBRUARY 1996

By: E. Duignan

As a representative of the North Queensland Naturalist's Club it was indeed a privilege to attend the conference. Not only did I meet the actual pathologists, specialist biologists, zoologists, coordinators and other principal team representatives who set down the guidelines for the 'Recovery' of our disappearing frogs, but I was able to find out exactly what is happening!

The Recovery Team's main objective is (a) to provide advice and support by monitoring and assessing the progress of the actions of those both in the field and in the media and (b) to ensure that these guidelines set down by the Frog Recovery Team are consistent with the recovery plans' objectives, also (c) to comment on the draft of progress and to report to the various funding agencies.

Overall, the meeting was a chance for the research specialists who are trying to determine from varying sources 'why frogs are disappearing' - to get together to discuss their findings to date and to follow through with recommendations for directional change to and in their work precedures if (after discussion) it was deemed necessary.

The reports (copies of which are now in the Naturalists Library) are those prepared by our leading pathologist Rick Speare and are summarys of the latest findings of bacterial research being carried out at the James Cook University in Townsville. The extent of death in frogs and the implications are really frightening. These reports are available for members perusal.

We, as members of the North Queensland Naturalists Club are encouraged to support and assist the recovery team in their work by finding some of the missing frogs of which there are 14 species. Dr. Marc Hero's tape recording of 'Frog Calls of North-east Queensland' together with the waterproof booklet 'A Guide to Stream-dwelling Frogs of the Wet Tropics Rainforests' allows easy identification and is still available through the Cape York Herpetologists Shop (now that the Green Possom Bookshop has closed). Contact Brian James on 671581 or write to Dr Jean-Marc Hero, Department of Zoology, James Cook University, Townsville 4811.

For those who are really keen and energetic your assistance in monitoring a site below Nandroya Falls in the Palmerston National Park in conjunction with the Cape York Herpetologists would be greatly appreciated. This is carried out on a regular monthly basis - the third Saturday of each month, meeting at the Henrietta Camp ground at 4pm. Please contact Michael Anthony on 547317 A/h or myself on 534857 A/h also.

A FIELD GUIDE TO INSECTS OF AUSTRALIA: A BOOK REVIEW

By: C.A. Pearce

A must for all keen naturalists with an interest in the amazing world of insect diversity, is 'A Field Guide To Insects of Australia' by Paul Zborowski and Ross Storey. Ross Storey has been a member of the North Queensland Naturalists Club for a number of years now, and most members will recall visiting the Mareeba DPI and its insect collection which is nurtured and curated by Ross. Who could forget the fantastic photos and narrative of Namibia or the slide show depicting insect mimicry and camouflage presented at several past meetings by Paul Zborowski. Both authors have a long history in the field of insect research, and have recently combined their knowledge and enthusiasm to produce an important edition to the amateur naturalists' library.

The book is aimed at readers who have little or no prior knowledge of insects. It is divided into two parts. Part 1 provides an introduction to insect anatomy, lifecycles, crypsis (how insects camouflage themselves in a given environment) and mimicry. The section 'Collecting Insects' clearly describes various methods of collecting, preserving and mounting insects, and includes a contact address for equipment suppliers. By reading the 'Introductory - Insect Anatomy' and using the final glossary as reference, anyone can use the insect key to identify an insect to the level of order using this text.

Part two of the book provides a synopsis of the classification, biology and lifestyle of the various insect classes and orders, including a section of psuedo insects; those critters known as springtails, proturans and diplurans. Throughout the book, if further information is desired, a recommended list for further reading is provided. The simple line drawings and extensive use of magnificent colour macrophotography beautifully illustrate all the chapters.

It is almost impossible to choose a favourite order of insects from the smorgasbord defined in this book, all are superbly illustrated and described. By a slim whisker, my favourite is the section on the Dipterans (mosquito, midges and flies). I was surprised to learn that despite flies being considered one of Australia's worst (nuisance) insect pests (the great Australian wave!), Australia has only 7,786 species of an estimated 150,000 species worldwide. The common house and bush flies (Family Muscidae) so often encountered, are really just the poorly dressed cousins of some amazing coloured flies that you could almost describe as beautiful - not to mention the bizarre looking antler flies, in which the females have hammer shaped heads, while the males have eyes on the end of long stalks which they use in ritualised combat with other males. If you don't believe me see page 144 of the book! Really, it's a superb book and available at good book stores!

LAKESIDE OBSERVATIONS

By: Ben Constable

For the third summer in succession the low level of Lake Tinaroo has left Wright Creek devoid of the wide expanse of water that once provided an attractive year round vista from my house on the Lakeside. However, farther upstream an earth dam impounds some of the flow down the old creek bed creating a lagoon some 300m in length by approx. 15m wide. This pleasant oasis surrounded by cattle pastures is an attraction during the summer months for several species of crakes that I have been able to study at close range, something not possible when the lake is full - for I could never locate them along the greatly extended shoreline.

During the cooler months the pads of the lily Nymphoides indica predominate the water surface, but the attractively frilled petals of the small white flowers cannot be appreciated until the sun has risen high enough to encourage the buds, tightly closed during the night, to open. As the weather warms up the intrusive Salvinia weed takes over, but as the summer advances further its continued proliferation is curtailed by the depredations of the beetles introduced to effect its control. Any gaps so created in this mat of Salvinia soon attract the tiny fern like leaves of the Azola pennata which in turn soon covers the surface, and across which in the early morning can be seen the trails left where Platypus have been foraging just below the thin rust coloured carpet.

Although I visit the area at daybreak throughout the year, crake calls and sightings have only been noted from late November to the end of February, so I believe the profusion of water weed has some connection with their arrival. Certainly the Salvinia in particular provides a source of food for both the White Browed and Baillons Crakes and when the sun comes up they can be seen walking about openly on it catching insects and/or picking up vegetable matter. The Spotless Crake is not so easily tempted and seldom leaves the thick grass on the banks or the strands of Smart weed in the shallows. I've repeatedly heard the characteristic 'bubbling' of these birds and the 'alarm' clucks as they have crept about within arms length of where I've been seated while remaining invisible in the thick vegetation.

Occasionally a head may be seen poking up amongst the weeds' stems as they try for a glimpse of the intruder, but most sightings I've had are when they flutter across the creek to settle on the grass or reeds for a brief look around before disappearing again amongst the herbage.

On fine mornings sporadic croaks along the creek could give no indication of the actual frog numbers, but a shower overnight would quickly transform such desultory croaking to a cacophony of sound reminiscent of crackling cane fires that blanket out all the other background noises. Often clusters of small fish with their heads just breaking the surface where the water was free of weeds, would attract numbers of voracious tortoises. Numbering eight or more these would dash in pursuit of their prey in all directions, their barely submerged shells creating wide bow waves and the dark triangles of their heads when they surfaced for air, standing out starkly against the sheen of water burnished silver by the rays of the rising sun.

Throughout December a pair of Black Duck were regularly seen feeding amongst the Salvinia weed and were invariably accompanied by an Australasian Grebe. This Grebe would continually dive beside and under the ducks, at times so close it kicked water in their faces when doing so, but apart from flinching when this happened the larger birds never displayed annoyance at such behaviour. I concluded that the dabbling of the the ducks disturbed the aquatic creatures from the weeds into the clear below where it was easier for the Grebe to see and catch them. It was obviously a symbiotic relationship, but I find it difficult to comprehend what benefit the ducks obtained from such an association.

Another interesting observation during the summer was when a pair of Dusky Moorhens appeared with five chicks. When two of these disappeared in the first few days the family then moved a hundred metres downstream where they were joined by two other adults. These adults appeared to enjoy a most harmonious relationship and although all were most attentive to the chicks no sigh of jealousy or discord was apparent.

While many Australia birds are known to cooperate in this way, to build nests and raise young, I was not previously aware that such extended families were part of the Dusky Moorhen's lifestyle.

WEEKEND IN THE HIGH COUNTRY

By: Sibil J. Kimmins

On the Australia Day long weekend 26/28th January 1996, members explored the upper Tableland country while based at 'Tall Timbers' Caravan Park, Ravenshoe. The weather being reasonably fine for late summer.

On Friday afternoon, a walk was taken to Little Millstream Falls. Various wildflowers grew in the grass alongside the track including *Haemodorum coccineum*, *Circuligo ensifolia* (grass potato) and *Aselepias fruiticosta* (milkweed). Monarch butterflies hovered round this, their host plant.

Near the falls, two species of *Adiantum* fern were identified and one small *Boea hygroscopia* (rock violet) was seen clinging to the rocks. Dainty Red-backed wrens flitted through the grass and a Blue-winged Kookaburra startled walkers with its raucous call.

In the grounds of the Van Park a wide variety of birds were seen and added to the weekend's birdlist. These included both Forest and Sacred Kingfisher, Pied and Grey Butcherbird, Currawong, Scaly-breasted Lorikeet and Common Koels cooeed regularly.

A dead snake on the road through open woodland was identified as a Keelback (*Tropidonophis mainii*). The long drive down Woorora Road over the Vine Creek Bridge past Mt. Ronald homestead through Glen Gordon Station to the Herbert River Crossing filled the day. As the river was in flood no attempt was made to cross but a number of stops were made to study the plants and wildlife. Lunch was enjoyed at a shady spot near Blunder Creek.

Near Mt. Ronald Red-Tailed Black Cockatoos were seen and Squatter Pigeons puttered around on the ground. Grey kangaroos and Whip-tail (pretty face) wallabies were sighted as well.

During lunch a Lemon-bellied Flycatcher was one of many bird species seen and we noted lots of *Murdannia graminea* (slug flowers) growing. *Hibbertia stricta*, *Hybanthus* and seven different species of *Eucalypt* common to the area were also noted.

On our return to Ravenshoe afternoon tea was enjoyed at the home of Club Members Judy and Jeff Stevens at Millstream Estates. Judy has successfully reared and released several Spectacled Fruit Bats orphaned by paralysis tick. (See Jnl 197 Article by Ann Johnson).

After packing up early on Sunday members wandered home via Tumoulin which was once the home of the highest railway station in Queensland. Walks were taken in the Tumoulin State

Forest where many species of Honeyeaters were recorded. Tiny brown fungi cups filled with 1mm black spore cases made an interesting observation along the Old Tumoulin Road and an unusual frog call was heard but not identified.

The spectacular drive down from the Evelyn Tableland to Atherton Tableland was followed by a walk through Wongabel Environmental Park. A Tooth-billed Bowerbird was heard mimicing other birds of the area and most obtained good views of a female Riflebird.

A total of 71 bird species were recorded for the weekend and 8 others were identified by their call. 20 species of butterflies were seen and a Platypus was observed in Vine Creek.

COMMON GARDEN VARIETY RED NECKED CRAKE?

By: Dawn Magarry

On 7th October, 1995 we found a family of Red Necked Crakes in our garden with four small chicks. Unfortunately a neighbourhood cat killed one of the adults but the other parent successfully managed to rear two of the four chicks. On the 19th January this year we observed another family with three chicks - only one of which was raised to fully feathered eventhough still black plumage and which we last saw on February 10th.

Just two weeks later (Feb 24th) we observed yet another pair of Red-necked Crakes in our garden with two well grown chicks - though smaller than the Feb 10th youngster. We beleive we have seen three families of the Crakes this season.

During one of our regular ABC bird counts at Centenary Lakes we noticed a Brown-backed Honeyeater with a moth in its beak hovering around about a foot off the grass. A clearer view revealed a fallen nest with tiny young inside. The adult, meanwhile, had retreated to a tree close by. We decided to hang the nest in a nearby palm and stood back to watch. After five minutes of twittering and fluttering over the previous site the parent must have heard the squeaking babies. Her calls immediately changed to an excited chirping as she found her brood. The moth was quickly fed, faecal sac removed, then off she went to hunt for more food. The rescue really made us feel good.

Towards the end of my stay I took a novice friend out bird-watching near Edinburgh. We arrived to find much ado, persons in windproof clothing toting binoculars, telescopes, telephoto lenses... was this a normal birders' outing or were they expecting some tedious Royal personage to turn up to go bathing? No, a rarity had been sighted and now it was sought by enough enthusiasts to scare it back to Novgorod or Nova Scotia or wherever it came from. Some sort of Sandpiper. I'd be flat out recognising any sort of Sandpiper, and my friend is pleased enough if she spots a bird...

NOTES ON THE GREAT BOWERBIRD'S (Chlamydera nuchalis) DIET AND FOOD (Alphitonia excelsa) IDENTIFICATION

By: Derna Elsden

While walking along the Mt. Spurgeon track during the Club's recent camp/outing to Mt. Carbine area, we paused to observe a Great Bowerbird. The bird was eating the small berries of a spindly shrubby tree which was approx. 3-4m in height with dark green glaucous (pale underneath) leaves. The berries were mainly green but looked as though they may go black when ripe. Unfortunately we wern't close enough to see which fruit the bird preferred.

Club member Ceri Pearce was intrigued as to the identity of the tree and took samples of both leaves and fruit to gain a P.I.D. (Positive Identification). With her winning smile Ceri engaged the services of Simon Thompson who works for the Department of Environment at Mareeba who came up trumps with the name of the mystery tree - Alphitonia excelsa, commonly known as Red Almond, Red Ash or Silver Leaf. It is an evergreen tree normally with a dense crown. Oval leaves being dark green above and silvery gray below. The greenish cream flowers are fragrant and are borne in late summer/autumn followed by round black fruits.

ADDITIONAL DIET OBSERVATIONS

By: Dawn Magarry

This morning while going about daily chores I heard loud fluttering and squeaking noises from birds outside the window. I gingerly peeped out to see about two dozen Metallic Starlings, a Spangled Drongo and a pair of White-breasted Woodswallows diving through the lawn sprinkler.

On closer inspection I noticed they were catching emerging flying termites. Besides catching the insects they were also taking a bath. So many wet Starlings and the Drongo sat on a small branch of a shrub that it broke!

A magpie lark then walked under the spray and began to pick off the termites as they emerged from the ground. Some of the Starlings joined him and also decided to bathe in the water on the ground. The magpie lark objected to this caper and chased them off. The pattern continued until the sprinkler timer switched off and the termites had been depleted.

On December 5th 1995, Butcherbirds alerted us to the presence of a Papauan Frogmouth on a nest in our garden. Despite periods of severe harassment by the Butcherbirds the Frogmouth baby thrived and the family left our garden on February 10th.

THE PHYLLACHORACEAE OF AUSTRALIA

By: Ceri Pearce

I am presently undertaking a taxonomic study of the family Phyllachoraceae in Australia, funded by Australian Biological Resources Study.

The Phyllachoraceae is a family of microfungi. In Australia, this family is represented by about 70 known biotrophic (living on live plant tissue) species of Phyllachora, the fungus causing black tar spots. These fungi are very mild parasites of leaves and may actually live in a mutualistic association with a plant, providing chemicals such as essential vitamins in exchange for photosynthate. They are found on a wide range of plants including species from the Gramineae (grasses), Leguminosae (legumes), Moraceae (figs), Myrtaceae (eucalypts, bottlebrush, etc), Palmae (palms), Cyperaceae (sedges), and Proteaceae (Grevillea, Hakea, etc).

Other known members of the Phyllachoraceae in Australia are Glomerella, both serious plant pathogens, and mild leaf parasites such as Ophiodothella and Polystigma (brightly coloured leaf spots). Rightly or wrongly included in the Phyllachoraceae at present is at least one genus of lichen (Lichenochora), marine species of fungi such as Marinosphaera and Swampomyces (saprobic on intertidal mangroves) as well as Phycolmelaina, a parasite of brown algae.

I would greatly appreciate members of the North Queensland Naturalists Club looking out for Phyllachoraceae species for me, even in your back garden. The fungus often resembles black scale insect infestation, somtimes with a yellow-green halo around the tar spot. Individual tar spot size may vary from a few millimetres diameter, to 10-20mm. Fresh specimens (the whole leaf) with collection details, such as place of collection, date, collector, and plant host identity (this is important, so if the plant's name is unknown, collection of flowers or fruit, and description of the plant can assist in identification), can be posted to me at: P.O. Box 1054 Mareeba, Qld 4880 or, if you are in the area, drop it in to the Department of Primary Industries, Peters Street, Mareeba. Fresh specimens can be refrigerated in the vegetable compartment for 1-2 days prior to forwarding them on, if immediate postage is not possible.

A number of new species of this group of fungi have been found in North Queensland in the last 5 years. It is likely that with an extensive survey of the Phyllachoraceae in Australia, many more species new to science will be located. Should you suspect a plant in your garden has black spot as described I would appreciate your putting a sample aside for me.

WET SEASON OUTING

By: Sybil J. Cummins

The North Queensland Naturalists Club members stayed close to home on March 10th, studying the mangroves from the boardwalk near the airport. The raised platform enables people to have close contact with nature in this unusual habitat, so much so that a Huntsman spider (Family Selenopidae) was almost mistaken for part of the bark on a treetrunk. Vegetation predominant was the Yellow mangrove Ceriops tagel, Cedar mangrove Xylocarpus micongiensis, River mangrove Aegiceras cornicalatum, Bruguiera gymnorrhiza and Avicennia marina. The various root systems including the small prop roots, knee roots and looping pneumatophores were fascinating to see.

Mud dwelling crustaceans and mudskippers were plentiful with numerous birds (including the Helmeted friarbird and Mangrove robin) were recorded. Two orchids, the Golden Orchid Dendrobuim discolour, and the Pencil Orchid Den. teretifolium were seen.

After morning tea at Centenary Lakes, the Cairns Central Swamp was explored under the guidance of Mr Rob Jago who was able to answer all questions relevant to the plantlife. Many introduced plants have infiltrated parts of the swamp, but there are still parts that remain as they were a hundred years ago. * A list of all plants of the Cairns Central Swamp is currently being recorded by Rob Jago and is being published as a series of articles in the Club's Journals beginning with Edition 194.

A large colony of fruit bats screamed in the forest canopy of the swamp, while Kookaburras and other bird species were noted calling. Red-back wrens were seen in grass at the creek's edge and a Zodiac or Day flying moth was thoroughly photographed. The quaint button orchid (not an orchid at all-but a flowering vine) Dischidia nummularia was draped over Dillenia alata trees.

During lunch break at the Centenary Lakes Park area Torres Strait Pigeons were seen feeding on Alexander palm berries. The walk around the lakes themselves after lunch revealed Fiscus copiosa, Planchonia careya and other natives of drier areas. An immature Brush cuckoo was seen near the road and the palm fairyland of the Botanic Boardwalk also produced huge Melaleucas, Hibiscus titiaceus and ferns.

The day brought a total of 50 bird species and 12 butterfly species including the Apollo jewel.

NAT'S NATTER

COMPILED BY NOELA DELL

The past six months have been thouroughly enjoyed by Club Members who have participated in the monthly field trips, weekend camps to Kauri Creek, Ravenshoe and Georgetown. (More about the camps from Sybil). The monthly meetings have proved very interesting and informative, with talks by guest speakers Keith Fisher, Paul Foster and Sandra Lloyd.

Keith showed his excellent slides and spoke on the Wetlands of the Cairns Airport. Paul Foster's talk on Cycads of Queensland held everyone in awe and Sandra's explanation of how she and her husband helped the local Islanders of Vanuatu set up businesses and Conservation Strategies for their land (which will become long term economic opportunities) instead of just selling off the land for its precious timber, was an education in itself.

We have also enjoyed viewing videos provided by Ted Thomson and Margaret Vale. Ted shared his Shelbourne Bay and Iron Range trip with us in two parts a third to be shown at a later date. Margaret's video was titled 'Wind on the Heath' a most informative video on the Heathlands of Lorne and Aireys Inlet of Victoria. Our thanks to these members for their time and effort.

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It's a sorry occasion to report that our club member Peter Hopkins has recently moved to Kangaroo Island, off the coast of South Australia. Peter has endeared himself to all over the years and we certainly wish him every success for the future - not to mention good birding on the Island. (Hope he's got lots of room for frequent visitors!).

******

It must be the year for baby girls! Three club members have become grandparents of girls. Congratulations to all Nana's and Pop's - Derna and Ron Elsdon, Noela and Mal Dell, and Eleanor Duignan a nana for the second time. Lets hope their taught well and become future committee members of the NATS!.

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We were sorry to hear that our dear friend Dawn Magarry has not been well these past few months. We hope you're well again very soon.

Dulcie Jolly has had an operation for leg problems recently. We trust you'll be on the track brandishing that walking cane again very soon Dulce!

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Margaret Howlett is back in action again after having a broken right arm recently - although you'd never know as it didn't seem to effect holding up the binocs. That's the spirit Margaret!

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Three cheers for Gophers! Club member Peg Cromie's health problems would be insurmountable to some, but with friend Peg's indomitable spirit she always finds a way to keep on getting out and about into her beloved 'bush'. We admire your spirit Peg and look forward to seeing you at future outings and camps with your new set of 'Gopher' wheels.

******

We have been informed that the death occurred recently of Dorrie Ziegenfusy. Dorrie and her husband Harry were staunch supporters of the Nat's Club in the early 1970's...
Our sincere condolences, Harry.

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Ann Sutherland's recent trip to Melbourne included a trip out with the local BOCA members to Yellingbo Reserve where Ann was fortunate to see the rare Helmeted Honeyeater. (In a cage eh! Ann? Ed.).

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Joan Beecroft and husband went 4W-Driving last August, their destination being Cape Melville N.P. Their trip was planned to take them through Lakefield N.P. to Kalpower Station but unfortunately road conditions prevented access. Their alternative route across Battle Camp Road through to Hopevale was successful and they spent a week at their destination, Cape Melville. Joan reported that cattle dams were very low at the time, but birding was excellent. Joan's new lifer for the trip was the Striped Honeyeater.

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Mal and Noela Dell are going to have another try at getting to Lawn Hill N.P. No broken bones along the way this time we hope! Their month away will also include a trip down the Matilda Highway to Cunnamulla and out to Eulo Bore where Noela hopes to find the Bourke's parrot. The remainder of the trip will take in the Bunya Mountains N.P. and then Brisbane for the expected birth of another new Naturalist opps! grandchild.

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SNAKES ALIVE! No. Many dead ones actually. Reports of several snakes in gardens and in homes this summer. One can understand the feelings of panic in these situations especially where small children are in close proximity. However, through education we are learning not to kill but to gently remove the uninvited guest. Please ring Kerry Lee on the SNAKE HOTLINE 070 54 1090 or 018 772 533. The Cape York Herpetologist Society's President, Michael Anthony is a snake removalist as well and his number is 070 54 7317. Lets hope this may help in keeping our reptiles alive.

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A couple of giggles during the Club's outing to the Cairns Central Swamp when two members thought they had found something new for the Botanical experts while exploring the swamp. They found an Asparagus fern with cedarlike berries only to discover that the Asparagus fern was growing under a Cedar tree! Later after lunch at Centenary Lakes, one avid birdo (we won't mention any names) was making hard work of viewing a Mangrove heron until she realised she was looking through the wrong end of the binoculars!

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Last but not least, the Club's Christmas break was held at the Little Mulgrave River Park, which is situated at the rear of the Mountain View Hotel. This event was well attended and members enjoyed the 'peace and tranquillity' of the area - some even took a dip in the crystal clear water to cool off. The water looked so inviting that Noela has threatened to bring her swimmers next time...

Last year I had to spend three weeks back in Scotland, and determined to fit in as much bird-watching as time allowed. Well equipped with thermal underwear and woolly socks, I set out from my parents' house to discover that they lived not a mile away from a great location, right on the edge of the sea, that hasn't yet made the 'Spotter's Guide'... odd, since back there good bird-watching spots can be thronged with shivering blue-nosed enthusiasts peering out from under their anoraks and polishing the drips off their field glasses. Lots of waders... I can tell they're waders as they're paddling about in water. Why did I not bring 'The Book'? They're all in cryptic colouring except... there was a beauty in the water - slim, elegant, graceful, white with black... I memorised its field-marks with care, then hurried home to consult 'The Book'.

It wasn't in 'The Book'. It wasn't in the next 6 'Books' I consulted, nor could my 'Very Knowledgable Friends' (who live locally) identify 'it'.

Was 'it' the first and only sighting of Stephenson's Straight-billed Avocet, or just an anorexic Eider Duck? uummm.

By: Una

CHECKLIST OF PLANTS OF 'THE CAIRNS CENTRAL SWAMP'

By: R.Jago

The following is PART 1 of a full comprehensive list of plants as previously recorded Section by Section commencing in Journal 194. The list is a cumuliation of all sections of the Swamp (as depicted in the map provided initially) this Part 1 is up to and including all Angiosperms (flowering plants) to the family of Dilleniaceae. Those with an asterisk preceeding the name are now naturalised species.

PTERIDOPHYTES	SECTIONS						
Adiantaceae							
Cheilanthes tenuifolia				D			
Aspleniaceae							
Asplemium nidis			C	D	E	F	
Blechnaceae							
Blechnum indicum	A	B		D		F	
Stenochlaena palustris	A	B	C	D	E	F	G
Dennstaedtiaceae							
Pteridium semihastatum				D			
Lindsaeaceae							
Lindsaea ensifolia subsp. agatti				D		F	
Marsileaceae							
Marsilea mutica				D			
Nephrolepidaceae							
* Nephrolepis exalta	A	B		D		F	
Nephhrolepis obliterata				D			
Ophioglossaceae							
Helminthostachys zeylanica				D		F	G
Parkeriaceae							
Ceratopteris thalictroides	A						
Polypodiaceae							
Drynaria rigidula	A	B		D	E	F	
Platycerium hilliia	A			D		F	
Psilotaceae							
Psilotum nudum	A						
Pteridaceae							
Acrostichum speciosum	A	B	C	D			G

Schizeceae							
Lygodium flexuosum					E	F	G
Lygodium microphyllum				D		F	
Schizea dichotoma				D			
Thelypteridaceae							
Christella dentata				D			
GYMNOSPERMS							
Cycadaceae							
Cycas media				D	E		
Podocarpaceae							
Podocarpus grayae				D		F	
ANGIOSPERMS							
Acanthaceae							
Acanthus ilicifolius				D		F	G
*Odontonema strictum		B	C				
*Perilepta dyeriana				D			
Pseuderanthemum variable				D			
*Ruellia tuberosa	A						
*Stephanopsysum longifolium						F	
Agavaceae							
Cordyline manners-suttoniae	A	B	C	D	E	F	G
*Dracaena? cannaefolia	A	B	C				
*Pleomele fragrans						F	
*Sansevieria trifasciata		B	C	D			
Aizoaceae							
Sesuvium portulacastrum	A	B	C	D		F	G
Amaranthaceae							
*Alteranthera dentata	A		C	D		F	
*Amaranthus viridis				D			G
*Gomphrena celosioides				D			G
Anacardiaceae							
Buchanania arborescens			C	D			
Euroschinus falcata	A	B	C	D			
*Mangifera indica	A	B	C	D			
Pleiogynium timorense				D			
Semecarpus australiensis				D		F	
Annonaceae							
*Annona glabra			C				
*Annona reticulata					E	F	
Cananga odorata				D			
Polyalthia nitidissima		B	C	D		F	G
Melodorum leichhardtii						F	

Apiaceae							
Centella asiatica	A			D			
Apocynaceae							
Alstonia muellerana				D		F	
Alstonia scholaris			C	D		F	G
Alyxia spicata			C	D			
*Catharanthus roseus			C	D			
Ichnocarpus frutescens				D	E	F	G
Melodinus acutiflorus						F	
Parsonsia velutina		B					
Tabernaemontana orientalis			C	D	E	F	
Araceae							
*Dieffenbachia leoniae		B		D			
*Epipremnum aureum	A		C	D			
*Epipremnum pinnatum				D			
*Philodendron? lacerium	A	B	C	D		F	
*Syngonium? podophyllum	A	B	C	D		F	
Araliaceae							
Polyscias australiana	A	B	C	D		F	
Polyscias elegans				D		F	G
Schefflera actinophylla	A	B	C	D	E	F	G
Arecaceae							
Archontophoenix alexandrae	A	B	C	D	E	F	G
*Arecastrum romanzoffianum	A	B	C	D			
Calamus australis				D		F	
Calamus caryotoides				D		F	
Calamus radicalis		B					
*Cocus nucifera						F	
Hydriastele wedlandiana	A	B				F	G
Ptychosperma elegans		B				F	
Asclepiadaceae							
Cynanchum carnosum			C	D			
Dischidia nummularia		B	C	D	E	F	G
Gymnanthera oblonga	A	B	C	D	E	F	
Hoya australis subsp. tenuipes			C	D		F	
? Tylophora sp.				D		F	
Asteraceae							
*Ageratum conyzoides	A				E	F	
*Bidens pilosa						F	
*Eclipta protrata						F	
*Synedrella nordiflora	A		C	D		F	
*Tithonia diversifolia		B		D		F	
8Wedelia trilobata	A	B		D			
Balanophoraceae							
Balanophora fungosa				D			

Bignoniaceae							
Deplanchea tetraphylla	A			D		F	
*Spathodea campanulata		B		D	E	F	
Boraginaceae							
Cordia dichotoma			C				G
Burseraceae							
Canarium australianum				D		F	G
Canarium vitiense						F	
Caesalpiniaceae							
*Cassia fistula						F	
*Cassia sp.						F	
Cynometra ramiflora			C				
*Senna obtusifolia		B	C	D			
Peltophorum pterocarpum	A					F	
Cannaceae							
*Canna indica				D			
Capparaceae							
Capparis lucida				D			
Caricaceae							
*Carica papaya						F	
Celastraceae							
Cassine melanocarpa			C	D			
Chenopodiaceae							
Suaeda australis	A		C	D			
Clusiaceae							
Calophyllum inophyllum	A	B	C				
Calophyllum sil	A	B		D			
Combretaceae							
Lumnitzera racemosa	A	B	C	D		F	G
*Quisqualis indica	A			D			
Terminalia arenicola						F	
Terminalia catappa	A	B	C				
Terminalia muelleri			C	D			G
Terminalia sericocarpa	A	B	C	D	E	F	G
Commelinaceae							
Commelina? cyanea		B	C	D			
Murdannia? graminea				D			
*Zebrina pendula	A	B	C	D		F	
Convolvulaceae							
*Ipomoea hederifolia				D	E	F	
Ipomoea? triloba			C	D		F	
*Merremia quinquefolia						F	

Cucurbitaceae							
Luffa cylindrica				D		F	
*Mormordica charantia				D		F	G
Cyperaceae							
Carex indica				D			
*Cyperus aromaticus	A			D		F	
Cyperus difformis	A			D			
Cyperus haspan				D		F	
Cyperus javanicus	A	B	C	D	E	F	
Cyperus polystachyos	A						
Cyperus sphaceiatus	A						
Cyperus trinervis	A			D			
Fimbristylis dichotoma				D			
Fimbristylis ferruginea	A	B		D		F	G
Fimbristylis polytrichoides	A			D			
Hypolytrum nemorum	A	B	C	D	E	F	
Rhynchospora corymbosa				D			
Schoenoplectus litoralis						F	
Scleria mackaviensis	A			D			
Scleria polycarpa	A	B	C	D	E	F	G
Dilleniaceae							
Dillenia alata	A	B	C	D	E	F	G
Hibbertia scandens				D			

**See next issue for Part 2 - CHECKLIST - CAIRNS CENTRAL SWAMP

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